

CLAIMS

What is claimed is:

- 1 1. A method for opening a communications stream between a user terminal
2 and a base station in a communications system comprising:
3 ✓ registering the base station and the user terminal with each other by
4 exchanging identification information and configuration information; '
5 sending a request to open a communications stream message from the user
6 terminal to the base station;
7 receiving a channel assignment message from the base station in response
8 to the request message, the channel assignment message including an identification of an
9 assigned communications channel for the communications stream;
10 sending data from the user terminal and receiving data from the base
11 station over the assigned communications channel.
- 1 2. The method of Claim 1, further comprising receiving data to transmit at a
2 buffer in the user terminal and wherein sending a request is performed in response to data
3 having been received in the buffer.
- 1 3. The method of Claim 1, wherein the request comprises an identification of
2 the registration information.
- 1 4. The method of Claim 1, wherein the request comprises an extended
2 training sequence to assist the base station in measuring spatial parameters.
- 1 5. The method of Claim 1, wherein sending the request message comprises
2 sending the request message on a random access channel that is shared with other user
3 terminals.

1 12. A machine-readable medium having stored thereon data representing
2 sequences of instructions which, when executed by a machine, cause the machine to
3 perform operations comprising:
4 registering a base station and a user terminal of a communications system
5 with each other by exchanging identification information and configuration information;
6 sending a request to open a communications stream message from the user
7 terminal to the base station;
8 receiving a channel assignment message from the base station in response
9 to the request message, the channel assignment message including an identification of an
10 assigned communications channel for the communications stream;
11 sending data from the user terminal and receiving data from the base
12 station over the assigned communications channel.

1 13. The medium of Claim 12, further comprising instructions which, when
2 executed by the machine, cause the machine to perform further operations comprising
3 receiving data to transmit at a buffer in the user terminal and wherein the instructions for
4 sending a request are performed in response to data having been received in the buffer.

1 14. The medium of Claim 12, wherein the request comprises an identification
2 of the registration information.

1 15. The medium of Claim 12, wherein the instructions for sending the request
2 message further comprise instructions which, when executed by the machine, cause the
3 machine to perform further operations comprising sending the request message on a
4 random access channel is assigned to the user terminal during registering and that is
5 shared with other user terminals.

16. The medium of Claim 12, wherein the request message includes information about the transmission power of the request message and wherein the channel assignment message includes information about adjusting the transmission power of the remote for use on the assigned communications channel.

17. A method for opening a communications stream between a user terminal and a base station in a communications system comprising:

registering the base station and the user terminal with each other by exchanging identification information and configuration information;

receiving a request to open a communications stream message at the base station from the user terminal;

sending a channel assignment message from the base station in response to the request message, the channel assignment message including an identification of an assigned communications channel for the communications stream;

receiving data from the user terminal and sending data from the base station over the assigned communications channel.

18. The method of Claim 17, wherein the request comprises an identification of the registration information.

19. The method of Claim 17, wherein the request comprises an extended training sequence to assist the base station in measuring spatial parameters.

20. The method of Claim 17, wherein receiving the request message comprises receiving the request message on a random access channel that is assigned to the user terminal during registering and that is shared with other user terminals.

1 21. The method of Claim 17, wherein the configuration information includes
2 information regarding the capabilities and communications environment of the user
3 terminal.

1 22. The method of Claim 17, further comprising sending a page from the base
2 station and wherein receiving a request comprises receiving a request in response to the
3 sent page.

1 23. The method of Claim 17, further comprising receiving data to transmit at a
2 buffer in the base station and wherein sending a page is performed in response to data
3 having been received in the buffer.

1 24. A machine-readable medium having stored thereon data representing
2 sequences of instructions which, when executed by a machine, cause the machine to
3 perform operations comprising:

4 registering a base station and a user terminal of a communications system
5 with each other by exchanging identification information and configuration information;

6 receiving a request to open a communications stream message at the base
7 station from the user terminal;

8 sending a channel assignment message from the base station in response to
9 the request message, the channel assignment message including an identification of an
10 assigned communications channel for the communications stream;

11 receiving data from the user terminal and sending data from the base
12 station over the assigned communications channel.

1 25. The medium of Claim 24, wherein the request comprises an identification
2 of the registration information.

1 26. The medium of Claim 24, wherein the request comprises an extended
2 training sequence to assist the base station in measuring spatial parameters.

1 27. The medium of Claim 24, wherein the instructions for receiving the
2 request message further comprise instructions which, when executed by the machine,
3 cause the machine to perform further operations comprising receiving the request
4 message on a random access channel that is assigned to the user terminal during
5 registering and that is shared with other user terminals.

1 28. The medium of Claim 24, wherein , the configuration information includes
2 information regarding the capabilities and communications environment of the user
3 terminal.

1 29. The medium of Claim 24, further comprising instructions which, when
2 executed by the machine, cause the machine to perform further operations comprising
3 sending a page from the base station and wherein the instructions for receiving a request
4 further comprise instructions which, when executed by the machine, cause the machine to
5 perform further operations comprising receiving a request in response to the sent page.